PRINCIPLES AND CRITERIA Interpretation and Issues

MC&I

Principle #1:Compliance with laws and FSCPrinciples

Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.

Criterion 1.1 Forest management shall respect all national and local law and administrative requirements.

Indicator 1.1.1 Records and availability of up-to-date relevant national and local laws, and regulations and policies, in particular those related to forest management.

Indicator 1.1.2 Forest managers are knowledgeable of the relevant national and local laws, and the regulatory framework.

Indicator 1.1.3Record of violations and actions taken to addressthem. (FSC 1.1.3 assess frequency of violations and 1.1.4 assess the relationship offorest manager with pertinent regulatory agencies)

- Federal Constitution
- National Forestry Policy, 1978
- National Policy on Biological Diversity, 1998
- National Forestry Act, 1984
- State Forest Enactments
- State Ordinances related to protection of wildlife
- State Forest Rules
- Land Conservation Act, 1960
- Environmental Quality Act, 1974
- National Parks Act, 1980
- Taman Negara (Kelantan) Enactment, 1938
- Taman Negara (Pahang) Enactment, 1939
- Taman Negara (Terengganu) Enactment, 1939
- National Parks (Johor) Corporation Enactment,
 1989

- Protection of Wildlife Act, 1972
- Aboriginal Peoples Act, 1954
- Occupational Safety and Health Act,
 1994
- National Land Code, 1965
- Water Act, 1920
- Employees' Social Security Act, 1969
- Workmen's Compensation Act, 1952
- Industrial Relations Act, 1967
- Trade Unions Act, 1959 (Act 262)
- Employment Act, 1955

Criterion 1.2 All applicable and legally prescribed fees, royalties, taxes, and other charges shall be paid.

Indicator 1.2.1 and 1.2.2 Availability of current list of all legally prescribed fees, royalties, taxes, and other charges and records

(FSC 1.2.1 Forest managers must demonstrate a working knowledge 1.2.2)

Criterion 1.3 In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.

Indicator 1.3.1 Forest managers are aware of all binding international agreements

(FSC 1.3.2 Forest managers to demonstrate a sensitivity)

- United Nations Convention on Biological Diversity, 1992
- Convention on Wetlands of International Importance Especially as
- Waterfowl Habitat, 1971
- International Tropical Timber Agreement, 1994
- United Nations Framework Convention on Climate Change, 1992
- Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973
- International Labour Organization (ILO) Conventions
- Convention No. 87 The Freedom of Association and Protection of the Right to Organise Convention, 1948 - Articles 2, 3, 5 and 11

- Convention No. 105 Abolition of Forced Labour Convention, 1957
- Convention No. 111 -Discrimination (Employment and Occupation) Convention, 1958 – The Right to Equal Treatment
- Convention No. 100 Equal Remuneration Convention, 1951
- The Right to Equal Pay
- Convention No. 98 The Right to Organise and Collective Bargaining Convention, 1949 - Articles 1 and 2
- Convention No. 29 Forced Labour Convention, 1930

Criterion 1.4 Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case-by-case basis, by the certifiers and the involved or affected parties.

Indicator 1.4.1 Availability of documentation of any conflicts between laws, regulations and the FSC Principles and Criteria.

Indicator 1.4.2 Forest managers are willing to participate in any process to resolve such conflicts that may arise with the affected parties.

(FSC 1.4.1 Forest managers are forthright and timely in informing the SCS auditors of any possible conflicts between laws, regulations and the FSC P&C.

1.4.2 Forest managers are willing to participate in balanced processes for resolving conflicts, at the request of SCS and/or FSC)

Criterion 1.5 Forest management areas should be protected from illegal harvesting, settlement and other unauthorised activities.

Indicator 1.5.1 Availability of legal provisions for the establishment and protection of the permanent reserved forest (PRF) for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

Indicator 1.5.2 Control of encroachment, illegal harvesting, hunting, and settlement, and other unauthorised activities in managed areas of the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak by forest managers, and forested areas outside the PRFs for Peninsular Malaysia by other regulatory agencies.

(FSC 1.5.1 The management plan contains express policies stating that the defined forest area shall be protected from illegal harvesting, settlement and other unauthorized activities).

(1.5.2 Forest managers devote resources to conduct surveillances of the FMU

1.5.3 Forest managers fotge positive and collaborative working relationship with pertinent enforcement agencies for protection of FMU)

Criterion 1.6 Forest managers shall demonstrate a longterm commitment to adhere to the FSC Principles and Criteria.

Indicator 1.6.1 Availability of policies or statements of commitment to forest management practices consistent with the FSC Principles & Criteria.

1.6.2 Policies or statements are communicated throughout the organization and contractors, and are made available to the public.

(FSC 1.6.1 specifies that there must be a public summary of commitment to FSC P&C 1.6.3 The scale of investment in forest management and administration is consistent with a long-term commitment to forest stewardship)

Principle #2: Tenure and Use Rights and Responsibilities

Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.

Criterion 2.1 Clear evidence of long-term forest use rights to the land (e.g. land title, customary rights, or leased agreements) shall be demonstrated.

Indicator 2.1.1 Availability of documentation of legal status, and established forest use rights of the land or forest resources within the relevant national and regional legal frameworks, in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

Indicator 2.1.2 Forest managers should support legally recognized mechanisms for resolving land claims.

Criterion 2.2 Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.

Indicator 2.2.1 Availability of documentation, if any, of legal or customary tenure or use rights of local communities within relevant national and regional legal frameworks in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

(FSC 2.2.1Local communities, and/or other stakeholders with duly recognized legal or customary tenure or use rights within the FMU have been identified and the nature of these rights are described and documented and honoured by forest managers)

Indicator 2.2.2 Forest managers should collaborate with holders of duly recognized legal or customary tenure or use rights within relevant national and regional legal frameworks, in activities that may affect such rights.

(2.2.3 Allocation by local communities of duly recognized legal or customary tenure or use rights to other parties is documented with evidence of free and informed consent)

Criterion 2.3 Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified.

Indicator 2.3.1 Records of all disputes over tenure and use rights are maintained for areas in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

(FSC 2.3.2 that established mechanisms have been employed to resolve disputes over tenure claims and use rights)

Indicator 2.3.2 Availability of appropriate mechanisms to resolve such disputes.

(FSC 2.3.3 The magnitude and severity of unresolved tenure claims and use rights disputes are limited to less than 5% of the land base)

Principle 3:Indigenous Peoples' Rights

The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected. *Criterion 3.1* Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.

Indicator 3.1.1 Availability of documentation of the customary rights of indigenous people's lands within relevant national and regional legal frameworks.

Indicator 3.1.2 Management of such lands is controlled by indigenous people unless they delegate control with free and informed consent to other agencies.

Indicator 3.13 Availability of appropriate mechanisms to resolve any conflicts and grievances between parties involved

Criterion 3.2 Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.

- Indicator 3.2.1 Forest management practices in indigenous people's lands recognized within relevant national and regional legal frameworks should not threaten or diminish, either directly or indirectly, their resources or tenure rights.
- *Criterion 3.3* Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers.
- Indicator 3.3.1 Availability of appropriate procedures within current administrative processes for identifying and protecting such sites and provisions for rights of access to these sites by indigenous people within relevant national and state legal frameworks or by mutual agreement.

Indicator 3.3.2 Availability of appropriate mechanisms for conflict resolution.

FSC P&C specify forest managers to demonstrate through policies and actions, awareness of and sensitivity to resources and tenure rights of indigenous people.

When tenure rights are potentially impacted opportunities must be afforded to participants of indigenous people in management planning

Forest managers consult through appropriate mechanisms

Forest managers engage in affirmative procedures for identifying and protecting sites of cultural, ecological and economic or religious significance

Field workers are trained to recognize such features

Maps are produced

Indigenous communities able to participate

Criterion 3.4 Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.

Indicator 3.4.1 Availability of documentation, if any, of traditional forest-related knowledge and practices of indigenous people in the use of forest species or management systems in forest operations.

Indictor 3.4.2 Availability of appropriate mechanisms and compensation for the commercial utilization of traditional forest-related knowledge and practices of indigenous people in accordance with existing legislation or by mutual agreement.

Principle #4: Community Relations and Worker's Rights

Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities.

Criterion 4.1 The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.

Indicator 4.1.1 Forest managers provide, where appropriate, support for training, retraining, local infrastructure, facilities and social programs commensurate with the scale and intensity of forest management operations.

Indicator 4.1.2 Qualified people in communities living within, or adjacent to, the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak are given preference for employment and contract works.

Criterion 4.2 Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.

Indicator 4.2.1 Up-to-date information on all applicable laws and/or regulations covering health and safety of forest workers should be disseminated to them.

Indicator 4.2.2 Availability of management policies addressing the health and safety of forest workers and their families in accordance with current legislation and/or regulations

Indicator 4.2.3 Appropriate safety and operational equipment in good working condition, including operational procedures, should be made available to forest workers in the work place.

Indicator 4.2.4 Forest managers should maintain up-to-date safety records in compliance with all applicable laws and/or regulations covering health and safety of forest workers.

Indicator 4.2.5 Demarcation of hazardous areas and provision of guidelines for storage and handling of hazardous materials.

Criterion 4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labour Organization (ILO).

Indicator 4.3.1 Provisions for workers to freely organize into Union of their own choice in accordance with ILO Convention No. 87.

Indicator 4.3.2 Provisions for workers the right to organize and undertake collective bargaining leading to agreements in accordance with ILO Convention No. 98 – The Right to Organise and Collective Bargaining Convention, 1949 - Articles 1 and 2, ILO Convention No. 111 – Discrimination (Employment and Occupation), 1958 - The Right to Equal Treatment, ILO Convention No. 100 – Equal Remuneration, 1951 - The Right to Equal Pay.

Indicator 4.3.3 Availability of appropriate procedures to address grievances raised by workers and/or their organizations and for conflict resolution.

Criterion 4.4 Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups directly affected by management operations.

Indicator 4.4.1 Forest managers should evaluate, through consultations, social impact of forest operations directly affecting communities, and the people and groups directly affected by the forest operations should have access to information on the results of the social impact evaluations.

Indicator 4.4.2 Forest planning and management practices should consider and incorporate the results of such evaluations

Criterion 4.5 Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.

Indicator 4.5.1 Provisions and measures within relevant national and regional legal frameworks should be taken to prevent loss or damage affecting the local people's legal or customary rights, property, resources, or their livelihoods.

Indicator 4.5.2 Appropriate mechanisms within relevant national and regional legal frameworks are employed to resolve grievances involving loss or damage affecting the local people's legal or customary rights, property, resources, or their livelihoods, caused by forest operations.

Principle #5: Benefits from the forest

Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

Criterion 5.1 Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.

Indicator 5.1.1 Records of investments and reinvestments made in forest management, including administration, research, human resource development, environmental and social costs in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak such as protection of biodiversity, environmental mitigation, monitoring and governance including business or development plan, cost benefit analysis, compensation and forgone revenue.

Indicator 5.1.2 Provisions and management are made to maintain, restore or enhance the productive capacity and ecological integrity of the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak to ensure its economic viability.

- *Criterion 5.2* Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.
- Indicator 5.2.1 Application of forest management practices to encourage the optimal use of forest resources.
- Indicator 5.2.2 Application of marketing operations to encourage local processing and diversifying the mix of commercial products derived from the forest.
- *Criterion 5.3* Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.
- Indicator 5.3.1 Availability and implementation of guidelines for reduced/low impact logging to minimize damage to residual stand.
- Indicator 5.3.2 Application of log extraction operations that minimize product wastage, degrade and foregone revenue opportunities.

Criterion 5.4 Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product

Indicator 5.4.1 Application of forest management strategy that encourages the production of a mix of commercial forest products, including the utilization of non-timber forest products, particularly by local community enterprises.

Criterion 5.5 Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.

Indicator 5.5.1 Availability and implementation of guidelines and/or procedures to identify and demarcate sensitive areas for the protection of soil and water, watercourses and wetlands.

Indicator 5.5.2 Availability and implementation of management guidelines, where appropriate, to maintain and/or enhance the value of forest services and resources.

Criterion 5.6 The rate of harvest of forest products shall not exceed levels which can be permanently sustained.

Indicator 5.6.1 Rate of harvest shall not be greater than estimated regrowth of the residual stand based on permanent sample plots within a pre-defined cutting cycle.

Indicator 5.6.2 Records of quantity of timber and important nontimber forest products harvested should be maintained, taking cognizance of their sustainability in the long term.

Principle #6: Environmental Impact

Forest management shall conserve biological diversity and its associated values, water resources, soils and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.

Criterion 6.1 Assessment of environmental impacts shall be completed – appropriate to the scale, intensity of forest management and the uniqueness of the affected resources – and adequately integrate into management systems. Assessments shall include landscape level consideration as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.

Indicator 6.1.1 Assessment of environmental impacts are carried out, including landscape level considerations, as well as the impacts of onsite processing facilities, appropriate to the scale and intensity of forest management, prior to commencement of forest operations in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

Indicator 6.1.2 Assessment of environmental impacts are carried out, including the potential impacts on endangered, rare and threatened species of flora and fauna, and the need for biological corridors in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak, appropriate to the scale and intensity of forest management.

Indicator 6.1.3 Forest management plans should incorporate measures to mitigate the environmental impacts identified in the assessments.

Criterion 6.2 Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g. nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collection shall be controlled. **Indicator 6.2.1** Availability and implementation of guidelines to identify and protect endangered, rare and threatened species of forest flora and fauna, including features of special biological interest such as seed trees, nesting and feeding areas in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

Indicator 6.2.3 Existence of cooperation between forest managers, and conservation organizations and regulatory authorities in implementing conservation and management activities.

Indicator 6.2.4 Hunting, fishing and collecting activities should be controlled and inappropriate activities prevented in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

Indicator 6.2.5 Forest workers shall be aware of endangered, rare and threatened species of forest flora and fauna found in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak. Such awareness shall be promoted among local communities.

Criterion 6.3 Ecological functions and values shall be maintained intact, enhanced, or restored, including:-

- a) Forest regeneration and succession.
- b) Genetic, species and ecosystem diversity.
- c) Natural cycles that affect the productivity of the forest ecosystem.

Indicator 6.3.1 Availability and implementation of management guidelines to assess post-harvest natural regeneration, and measures to supplement natural regeneration, where necessary, in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

Indicator 6.3.2 Availability and implementation of guidelines for the conservation of genetic, species and ecosystem diversity in the FMU.

Indicator 6.3.3 Harvesting is designed taking into consideration the need for biological corridors and buffer zones for wildlife.

Criterion 6.4 Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources.

Indicator 6.4.1 Representative areas of existing forest ecosystems, appropriate to the scale and intensity of forest management operations, identified and selected under 6.2.2, are demarcated and protected in their natural state.

Indicator 6.4.2 Implementation of appropriate protection and management activities for these areas.

Criterion 6.5 Written guidelines shall be prepared and implemented to:- control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources.

Indicator 6.5.1 Availability and implementation of harvesting procedures to protect the soil from compaction by harvesting machinery and erosion during harvesting operations.

Indicator 6.5.2 Implementation of reduced/low impact logging to minimize damage to the environment.

Indicator 6.5.3 Availability and implementation of guidelines for forest road lay-out and construction, including log landings and drainage requirements.

Indicator 6.5.4 Availability and implementation of guidelines for conservation of buffer strips along streams and rivers.

Criterion 6.6 Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.

Indicator 6.6.1 Availability and implementation of guidelines and/or procedures on the use of chemicals in the forest approved by relevant regulatory authorities.

Indicator 6.6.2 Forest workers should be aware of the procedures on the use of approved chemicals in the forest.

Criterion 6.7 Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.

Indicator 6.7.1 Non-organic wastes such as oil, tyres, containers etc. should be recycled, where possible.

Indicator 6.7.2 Containers, liquid and solid non-organic wastes including fuel and oil should be disposed of in an environmentally appropriate and legal manner.

Criterion 6.8 Use of biological control agents shall be documented, minimized, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.

Indicator 6.8.1 Documentation, monitoring and control of biological control agents in accordance with relevant national and regional laws, and internationally accepted protocols, if such agents are used.
Criterion 6.9 The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.

Indicator 6.9.1 Evaluation of potential ecological impacts of exotic plant and animal species, if such species are to be used.

Indicator 6.9.2 Documentation, monitoring and control of exotic plant and animal species, if such species are used.

Criterion 6.10 Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion:-

a) entails a very limited portion of the forest management unit; and

b) does not occur on high conservation value forest areas; and

c) will enable clear, substantial, additional, secure, long-term conservation benefits across the forest management unit.

Indicator 6.10.1 Conversion of forest area to plantations, consistent with the provisions of relevant national and regional legal frameworks and policies, should provide substantial, additional, secure and long-term benefits across the forest management unit.

Indicator 6.10.2 Conversion of forest area to non-forest land uses, consistent with the provisions of relevant national and regional legal frameworks and policies, should provide higher economic values as compared to its original use, in the overall context of the need for socio-economic development of the country.

Principle 7: Management Plan

A management plan – appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.

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Criterion 7.1 The management plan and supporting documents shall provide:-

- a) Management objectives.
- b) Description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands.
- c) Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories.
- d) Rationale for rate of annual harvest and species selection.
- e) Provisions for monitoring of forest growth and dynamics.
- f) Environmental safeguards based on environmental assessments.
- g) Plans for the identification and protection of rare, threatened and endangered species.
- h) Maps describing the forest resource base including protected areas, planned management activities and land ownership.
- i) Description and justification of harvesting techniques and equipment to be used.

Indicator 7.1.1 Implementation of forest management plan prepared in accordance with existing regional guidelines and relevant provisions listed in Principle #1 covering items (a) to (i) in Criterion 7.1. *Criterion 7.2* The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.

Indicator 7.2.1 Implementation of procedures to periodically revise the forest management plan, incorporating the results of monitoring or new scientific and technical information, the frequency of which should be appropriate to the scale and intensity of forest management operations, so as to respond to changing environmental, social and economic circumstances.

Indicator 7.2.2 Forest managers should be aware of new scientific and technical information pertinent to the management of the area to be certified.

Criterion 7.3 Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plan.

Indicator 7.3.1 Availability of facilities and programs for training of forest workers for proper implementation of the forest management plan.

Indicator 7.3.2 Forest workers should be trained as to their respective roles in the implementation of the forest management plan.

Criterion 7.4 While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed in Criterion 7.1.

Indicator 7.4.1 A summary of the primary elements of the forest management plan as prepared and implemented under Indicator 7.1.1 should be made available to the public.

Principle 8: Monitoring and Assessment Monitoring shall be conducted – appropriate to the scale and intensity of forest management – to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.

Criterion 8.1 The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.

Indicator 8.1.1 Forest managers should comply with the regulatory monitoring procedures in accordance with relevant national and regional guidelines of the Forestry Departments and other relevant agencies.

Indicator 8.1.2 Forest managers should identify and implement appropriate monitoring procedures, in accordance with the scale and intensity of the forest management operations, for assessing social, ecological, environmental and economic impacts. *Criterion 8.2* Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators:-

- a) Yield of all forest products harvested.
- b) Growth rates, regeneration and condition of the forest.
- c) Composition and observed changes in the flora and fauna.

d) Environmental and social impacts of harvesting and other operations.

e) Costs, productivity, and efficiency of forest management.

Indicator 8.2.1 Forest managers should gather the relevant information, appropriate to the scale and intensity of the forest management operations, needed to monitor the items (a) to (e) listed in Criterion 8.2.

Criterion 8.3 Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain of custody".

Indicator 8.3.1 Forest managers should provide relevant documents for identifying all forest products leaving the area to be certified so that their origin could be easily determined.

Criterion 8.4 The results of monitoring shall be incorporated into the implementation and revision of the management plan.

Indicator 8.4.1 Forest managers should incorporate the results and findings of the monitoring activities into the implementation and revision of the forest management plan.

Criterion 8.5 While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2.

Indicator 8.5.1 A summary of the results of monitoring indicators, including those listed in Criterion 8.2, should be made available to the public.

Principle 9: Maintenance of High Conservation Value Forests

Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach. **Criterion 9.1** Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.

Indicator 9.1.1 Forest managers should conduct an assessment of HCVFs in accordance with relevant national and regional legal and regulatory frameworks, appropriate to scale and intensity of forest management operations in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak, and in consultation with relevant stakeholders and experts.

Criterion 9.2 The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.

Indicator 9.2.1 Forest managers should provide the assessors with a list of relevant stakeholders who have been consulted regarding the HCVFs.

Indicator 9.2.2 Forest managers should demonstrate that the forest management operations consider and protect areas of high conservation value in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

Criterion 9.3 The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.

Indicator 9.3.1 Measures to demarcate, maintain and/or enhance the HCVF attributes are documented in the forest management plan and effectively implemented.

Indicator 9.3.2 These measures should be included in the forest management plan summary made available to the public.

Criterion 9.4 Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.

Indicator 9.4.1 Forest managers should conduct, appropriate to scale and intensity of forest management operations, annual monitoring to assess the effectiveness of the measures in the management of the HCVFs in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.

Indicator 9.4.2 Forest managers should incorporate the results and findings of the HCVFs monitoring activities into the implementation and revision of the forest management plan.

SCS Forest Conservation Program-Malaysia Interim Standard 2005

P10 Plantations shall be planned and managed in accordance with Principles and Criteria 1 -9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests. **C10.1** The management objectives of the plantation, including natural forest conservation and restoration objectives, shall be explicitly stated in the management plan, and clearly demonstrated in the implementation of the plan.

10.1.1. The management plan for the defined plantation forest area includes a presentation of the landowner and/or plantation owner objectives

10.1.2. The plantation forest objectives include express policies for natural forest conservation as well as restoration of degraded natural forest areas. The proportion of the plantation forest operation that is allocated to natural forest maintenance and restoration exceeds regional norms

10.1.3 Plantation forest managers demonstrate a systematic pattern of implementing the management plan

C 10.2 The design and layout of plantations should promote the protection, restoration and conservation of natural forests, and not increase pressures on natural forests. Wildlife corridors, streamside zones and a mosaic of stands of different ages and rotation periods shall be used in the layout of the plantation, consistent with the scale of the operation. The scale and layout of plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape.

10.2.1. Plantation forest managers institute measures to protect, restore and conserve key areas of natural forests within the ownership

10.2.2. The flow of forest products from the plantation forest contribute to regional demands and thereby help to reduce pressures on natural forests within the region

10.2.3. The spatial pattern of planted stands within the plantation forest operation mimics natural patterns found within the landscape

10.2.4. Streamside buffer zones of widths that meet or exceed regulatory requirements (or regional norms if not regulatory requirements exist) are established, within which natural vegetative cover is maintained or established

10.2.5. Natural vegetative corridors are established for wildlife movement when the scale, distribution, and ecological setting of the ownership allow for it

C10.3 Diversity in the composition of plantations is preferred, so as to enhance economic, ecological and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes and structures.

10.3.1. A variety of species and provenances are employed in the planting program

10.3.2. The management regimes introduce diversity through practices such as: variable rotations, cut blocks of different size and shape, maintenance of volunteer (naturally established) seedlings within planted stands

10.3.3 The plantation forest management plan contains biodiversity objectives, policies and guidelines

C10.4 The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives. In order to enhance the conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts.

10.4.1. Exotic tree species are planted only after an assessment of native species is conducted, in which it is demonstrated that native species cannot achieve comparable performance levels

10.4.2. Periodic monitoring is conducted of the adaptability of exotic stands, as indicated by measured levels of mortality, disease and insect outbreaks; the results of monitoring are summarized and made available to the SCS auditor(s)

10.4.3. Selection of tree species to be planted and their provenances is based on field trials that demonstrate their suitability to the plantation sites and management objectives

10.4.4. Information about the source of seed or planting stock is presented in the management plan or another suitable document

C10.5 A proportion of the overall forest management area, appropriate to the scale of the plantation and to be determined in regional standards, shall be managed so as to restore the site to a natural forest cover.

10.5.1. Representative samples of existing natural ecosystems are being protected or restored in their natural state

10.5.2. The percentage of the plantation forest operation that is devoted to natural forest cover exceeds regional plantation forestry norms

10.5.3. Areas of natural forest or natural vegetative cover are delineated on maps and, as necessary, delineated in the field for purposes of assuring protection

10.5.4. The management plan contains policies and guidelines for natural area reserves within the plantation forest operation

C10.6 Measures shall be taken to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns.

10.6.1 Plantation forest managers actively engage in or otherwise support field research to assess trends in soil productivity; soil types found within the plantation forest area are mapped and considered during field operations

10.6.2 Prescriptions for the establishment, tending and final harvest of planted stands are designed with consideration to soil health and productivity

10.6.3 Site disturbing activities do not adversely impact aquatic and riparian resources including water quality and do not measurably alter the hydrologic characteristics of the site; planted stand establishment is avoided on steeply sloped terrain

10.6.4 All stream courses within the operating area are mapped

10.6.5 The management plan contains policies and guidelines for soil maintenance and water quality protection

C10.7 Measures shall be taken to prevent and minimize outbreaks of pests, diseases, fire, and invasive plant introductions. Integrated pest management shall form an essential part of the management plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilizers. Plantation management should make every effort to move away from chemical pesticides and fertilizers, including their use in nurseries. The use of chemicals is also covered in Criteria 6.6 and 6.7.

10.7.1. Standard operating procedures for management of the plantation forest include regular monitoring for pest and pathogen activity, inordinate levels of mortality, and the spread of invasive exotic plant

10.7.2. The management plan contains policies and guidelines for integrated pest management that are demonstrably followed in the field

10.7.3 Forest managers, through their policies and actions, demonstrate a commitment to limit the use of chemical pesticides and fertilizers

10.7.4 For operations in fire prone regions, there is a written fire prevention and suppression plan; the level of detail reflects the scale and intensity of the operation **C10.8** Appropriate to the scale and diversity of the operation, monitoring of plantations shall include regular assessment of potential on-site and off-site ecological and social impacts, (e.g., natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social well-being), in addition to those elements addressed in Principles 8, 6 and 4. No species should be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection of local rights of ownership, use or access.

10.8.1. Monitoring incorporates ecological and social impacts of plantation forest activities

10.8.2 Monitoring focuses on both on-site and off-site impacts such as landscape level effects generated by the species that are being planted

10.8.3 Species are selected for planting only after local trials and other empirical evidence demonstrates their suitability to the site

10.8.4 Acquisition of land for establishment of plantation forests does not adversely impact, without due compensation, local ownership rights or access/use pattern

C10.9 Plantations established in areas converted from natural forests *after November 1994* normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the certification body that the manager/owner is not responsible directly or indirectly of such conversion.

10.9.1 Records are of sufficient detail to enable the SCS auditor(s) to determine if conversion of natural forests to plantations has occurred since November, 1994, within the land area for which certification is being sought

10.9.2 Any such conversions, if they have taken place, can be demonstrated to not be attributable to the current managers/owners